



### Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

Chicopee City/Town

### WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

#### A. General Information

Important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return
key.





Applicant: Chicopee Country Club tomdr@aol.com E-Mail Address 1290 Burnett Road Mailing Address Chicopee MA 01020 City/Town State Zip Code (413) 594-9295 Phone Number Fax Number (if applicable) 2. Representative (if any): Irrigation Consulting, Inc. Michael Igo, PE migo@irrigationconsulting.com Contact Name E-Mail Address 4 Hotel Place Mailing Address Pepperell MA 01463 City/Town State Zip Code (978) 433-8972 (978) 433-2788 Phone Number Fax Number (if applicable) **B. Determinations** 1. I request the City of Chicopee make the following determination(s). Check any that apply: Conservation Commission a. whether the area depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act. b. whether the boundaries of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated. c. whether the work depicted on plan(s) referenced below is subject to the Wetlands Protection Act. d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any municipal wetlands ordinance or bylaw of: City of Chicopee Name of Municipality e. whether the following scope of alternatives is adequate for work in the Riverfront Area as depicted on referenced plan(s).

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### C. Project Description

Municipal P		City/Town 00011 Parcel/Lot Number					
b. Area De							
b. Area De		Parcel/Lot Number					
Municipal P	scription (use additional pap						
		b. Area Description (use additional paper, if necessary):					
proposed co projected or	Municipal Public 18-Hole Golf Course opened in 1965 (prior to Wetlands Protection Act). 243-Acre Golf Course located adjacent to Westover Air Base and Chicopee Memorial State Park. Cooley Brook is in northely vicinity, but 200-foot Riverfront Area does not fall within active golf course or proposed construction area. Wooded swamps are within northerly vicinity with 100-foot Buffer Zones projected onto golf course. Ponds on golf course have culvert outlet to wooded swamps and, therefore, have been assumed to be regulated resources areas due to the interconnectivity.						
	d/or Map Reference(s): area Map: Chicopee Country	Club 01/03/2012 Date					
(17.717.20)	Details: Chicopee Country Cl						
Title	retails. Officopee Country Of	Date					
Title		Date					
. a. Work D	escription (use additional pag	er and/or provide plan(s) of work, if necessary):					
construction activork is temporal shall be pulled the stalled by hand poring underneal hall be set up consity Polyethy	vity. No proposed grading c y in nature (pipe and condui rough turf using vibratory plans. I. In order to connect mainling th existing pond is required wan upland sides of pond. Bor	tem for Golf Course. Work entails minor buffer zone hanges. No proposed change in ground surface type. All installation). Mainline pipe shall be trenched. Lateral lines by (see Installation Details). Sprinkler heads generally are e pipe from one part of the Golf Course to another, a pipe is directional drilling (see Installation Details). All equipment grill bit shall traverse underneath pond to pull High e, hay bales, and/or waddles shall be used to protect and operation.					
<del></del>							
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### C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

10.02 (2) (a) 2: Activities conducted to maintain, repair, or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide ... water ... provided work minimizes impacts to wetland resources (replacement irrigation system)

10.02 (2) (b): No NOI if issuing authority's judgment determine work shall not alter jurisdiction Resource 10.02 (2) (b) 1(g): Activities that are temporary in nature, have negligible impacts (irrigation installation), and are necessary for planning and design purposes.

3.	a. Riv	If this application is a Request for Determination of Scope of Alternatives for work in the erfront Area, indicate the one classification below that best describes the project.
		Single family house on a lot recorded on or before 8/1/96
		Single family house on a lot recorded after 8/1/96
		Expansion of an existing structure on a lot recorded after 8/1/96
		Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
		New agriculture or aquaculture project
		Public project where funds were appropriated prior to 8/7/96
		Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
		Residential subdivision; institutional, industrial, or commercial project
		Municipal project
		District, county, state, or federal government project
		Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
		Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification ve (use additional paper and/or attach appropriate documents, if necessary.)
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### D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

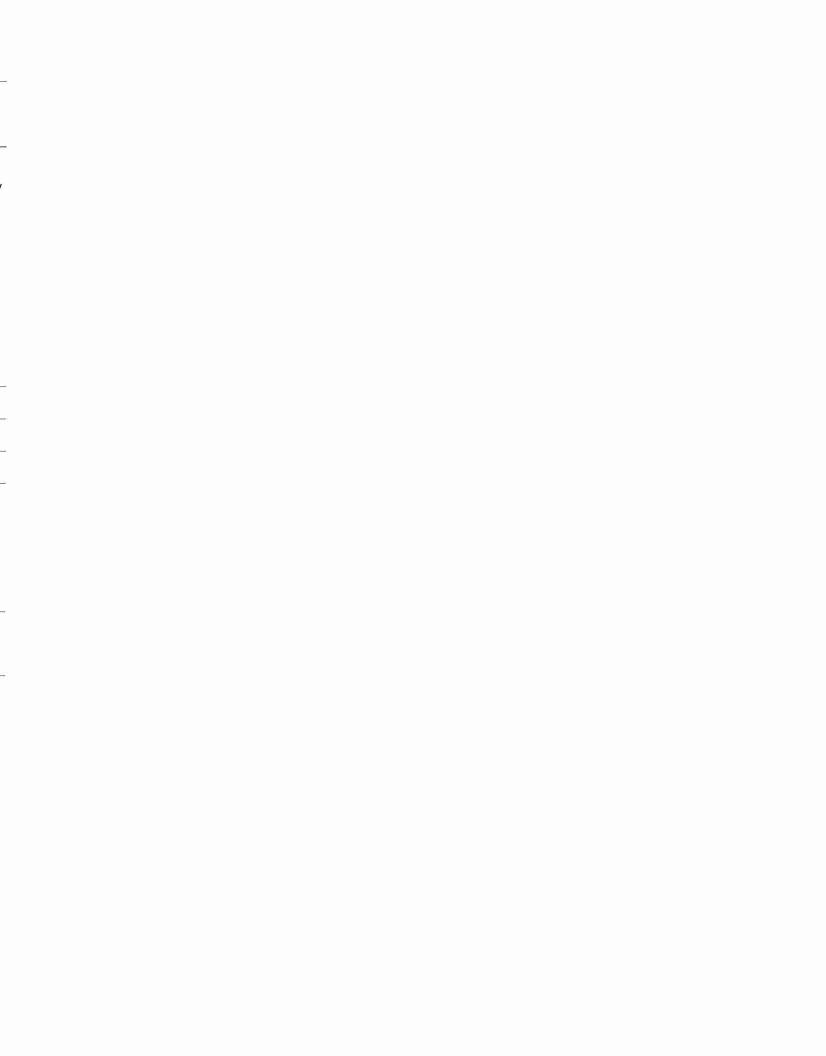
I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Chicopee Country Club (Owner: City of Chicopee MA; Director	
Name	or com mornad or birdeo)
1290 Burnett Road	
Mailing Address	
Chicopee	
City/Town	
MA	01020
State	Zip Code
Signatures:	
I also understand that notification of this Request will be placed in in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection	on Act regulations.
I also understand that notification of this Request will be placed in	on Act regulations.

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Providing innovative design solutions for irrigation worldwide.

January 3, 2012

Chicopee Conservation Commission City of Chicopee Chicopee City Hall 17 Springfield Street Chicopee, MA 01013

RE: Request for Determination (RFD)
100-Foot Buffer Zone Work
Chicopee Country Club (City of Chicopee Owned Golf Course)
1290 Burnett Road

#### Dear Committee Members:

Please consider this letter a Request for Determination as to whether the proposed irrigation system replacement at Chicopee Country Club requires the filing of a Notice of Intent. Irrigation Consulting, Inc. (ICI) has been retained to design and oversee construction of a new, replacement irrigation system for Chicopee Country Club—adjacent to Westover Air Base and Chicopee Memorial State Park. This construction is crucial to the long-term sustainability of the golf course (a substantial revenue stream for the City): the existing irrigation system is antiquated (at least 25 years old), malfunctioning, and inefficient with water distribution. The current design consists of a single row of sprinkler heads connected to an irrigation pipe running down the middle of the fairway. The sprinklers are controlled by a single solenoid valve that opens upon a signal from the irrigation controller. This design is inefficient because the quality of irrigation coverage of single-row sprinklers at their furthest extent of the throw radius is poor and provides for very uneven watering.

The new irrigation system will alleviate the inefficiencies described above by using *at least* two rows of sprinklers—improving coverage and allowing the system to run a shorter amount of time and reducing overwatering. The efficiency of the new irrigation system is estimated to be 80% where the old system is probably on the order of 60%.

ICI has enclosed a Resource Area Map (see IR-1) describing the jurisdictional areas from a desk study and site walk with Brian Vinchesi, President of ICI; Kate Brown and Jim Dawson, Chicopee Department of Planning and Development; and Tom DiRico, Chicopee Country Club Director on 09/23/11. Cooley Brook traverses generally from east to west to the north between the golf course and the air base. It is a perennial stream as designated on both the USGS Quadrangle Map of Record and Massachusetts Geographic Information System (MassGIS). The 200-Foot Riverfront Area associated with Cooley Brook does not fall within the actual playing areas of the golf course property—where irrigation construction is limited to.

There are extensive Bordering Vegetated Wetlands (BVW) areas and minor intermittent streams (as designated by USGS and MassGIS) that abut and/or are interspersed within the golf course playing area. The 100-Foot Buffer Zone associated with these does fall within the proposed areas of work for this new irrigation system. However, this work:

- is temporary in nature
- · proposes no grade changes
- proposes no changes in ground surface type

#### Description of Work

Irrigation piping installation is broken down into two major groups: mainline and lateral lines. Mainline is larger in diameter, always pressurized, and supplies lateral lines. Lateral lines are smaller in diameter, also always pressurized, and feed the individual sprinkler heads directly. Each has a different method for installation. Larger-diameter mainline piping must be placed in excavated trenches due to its size and because its sections are mechanically joined together. Mainline pipe trench bases must be properly prepared and compacted to ensure sustainable use. Trenches for larger mainlines (greater than 6 inches) may require a backhoe excavator. Smaller mainlines 6 inches and under can utilize a trencher—a device with a digging chain attached to a rotating boom (resembling a large chain saw). A trencher can provide precise excavation with minimal spoils. It can also cut through tighter soils easier than a backhoe. Prior to the excavation of all mainline trenches, a sod-cutter is used to trim and preserve the existing vegetation and roots from the top few inches of soil into sod patches. These patches are removed from the proposed excavation area and placed aside during mainline installation. Once the backfilling and spoil removal is complete, the sod is placed back over the excavation. This process takes place in a matter of hours: generally, no trench or spoils are left open overnight. This method greatly reduces the effects of temporary disturbance from trenching by allowing a near instantaneous solution for erosion control and stabilization. If the original cutting was performed properly, the replaced sod will take root again quickly. ICI has provided an example of trench installation on irrigation projects they have overseen on the enclosed plan details (see plans).

Lateral pipes, on the other hand, can be installed without a trench through a machine called a vibratory plow. Basically, this device is a large vibrating knife that makes an incision in ground to the specified depth leaving no spoils. Lateral pipe can be pulled through the incision as it is made. Minor tamping and clean-up completes the installation. Sprinklers are then installed on the lateral pipes. Picture examples of lateral installation are provided on the enclosed details.

Due to topography and golf course layout, it will be necessary to directional drill for a flexible mainline pipe underneath an existing narrow pond between two golf holes. It is believed that enough soil exists under the pond and the length is short enough such that flexible piping can run underneath the pond and not disturb the watercourse. Silt fence, hay bales, and/or filter socks will also be installed around directional boring equipment as a precaution. Any material disturbed in the vicinity of the drilling equipment will be replaced to its existing condition. Details have been provided on the plans.

Since the methods of golf course irrigation described above are widely practiced, routine methods that minimize on-site disturbance and no permanent grade changes are proposed, the project proposes to use erosion and sediment control devices (silt fence and hay bales) only at the directional drilling sites. Prospective contractors must meet experience and project qualifications in order to bid on the project. Those qualified to work on the project will have the acumen and sensitivity to deal with erosion and sediment control issues. They will work expeditiously with all open trench work and mobilize equipment within straight and narrow pathways on already disturbed golf course areas.

4 Hotel Place, Pepperell, MA 01463 o Tel: 978-433-8972/Fax: 978-433-2788 o www.irrigationconsulting.com

If you have any questions or require any additional information, please do not hesitate to contact me or Brian Vinchesi, President of ICI. Based on our findings, experience, and site walk with the local Conservation Commission Agent, we believe a <u>negative determination</u> for this work is appropriate on the January 18, 2012 hearing.

Sincerely,

Michael Igo, PE, LEED AP, CID Engineering Project Manager

CC: Brian Vinchesi, President, Irrigation Consulting, Inc.
Thomas J. DiRico, Director of Golf, Chicopee Country Club (City of Chicopee)
Kate Brown, Chicopee Department of Planning and Development
Jim Dawson, Chicopee Department of Planning and Development
Project File

<sup>4</sup> Hotel Place, Pepperell, MA 01463 • Tel: 978-433-8972/Fax: 978-433-2788 • www.irrigationconsulting.com

